AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method for interference management of a processing communications satellite serving multiple user terminals in a satellite based cellular communications system, said method comprising:

prioritizing the multiple user terminals according to a selected criteria;

receiving a request for service from a user terminal;

accessing a database of communications system parameters including user terminal database parameters having a prioritization listing, antenna pattern parameters, spacecraft/antenna pointing error parameters, and link condition database parameters;

applying an algorithm to at least one communications system parameter from the database of communications system parameters to determine a connection parameter to minimize intra-system interference based in part upon the database of communications system parameters for the user terminal;

allocating the connection parameter to the user terminal; and

making a communications connection with the processing communications satellite by the user terminal using the connection parameter.

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Original) The method as defined in claim 1 further comprising monitoring if the communications connection is still active.

7. (Previously Presented) The method as defined in claim 6 further comprising redetermining the connection parameter for the user terminal based upon an updated database of communications system parameters.

8. (Previously Presented) The method as defined in claim 1 wherein the connection parameter is a frequency channel.

9. (Original) The method as defined in claim 1 wherein the connection parameter is a time slot.

10. (Previously Presented) The method as defined in claim 1 further comprising updating the database of communications system parameters after the communications connection ends.

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Previously Presented) The method as defined in claim 19 further comprising redetermining the frequency channel and time slot allocation after a determination is made that the communications connection is still active.

18. (Canceled)

19. (Currently Amended) A method for interference management of a processing communications satellite serving multiple user terminals in a satellite based cellular communications system, said method comprising:

receiving a request for service from a user terminal;

accessing a database of communications system parameters including a user database, a priority listing of said user terminal, antenna pattern database, spacecraft/antenna pointing error database and link condition database;

applying an algorithm to at least one communications system parameter from the database of communications system parameters to determine a frequency channel and time slot parameter allocation for the user terminal to minimize intra-system interference based upon the database of communications system parameters;

allocating the frequency channel and time slot parameter to the user terminal;

making a communications connection by the user terminal using the frequency channel and time slot parameter;

periodically redetermining the frequency channel and time slot parameter allocation for the user terminal to continue to minimize intra-system interference; and

updating the databases after the communication connection has ended.

20. (Previously Presented) The method as defined in claim 19 comprising including within the plurality database of communications system parameters location of active user terminals and frequency channel and time slots allocated to the active user terminals.

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21. (New) The method of claim 1, wherein said selected criteria includes: bandwidth selected by the user terminal.

22. (New) The method of claim 1, wherein said selected criteria includes a fee schedule of the user terminal.

23. (New) The method of claim 1, wherein said selected criteria includes an amount of error correction selected by the user terminal.

24. (New) The method of claim 19, wherein accessing a priority listing of said user terminal includes accessing at least one of a fee schedule, an error correction encoding amount, a bandwidth requirement, and combinations thereof of said user terminal.